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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KIM, JUNG W

ART UNIT PAPER NUMBER

2132

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/454,646

Applicant(s)

CHALLENGER ET AL.

Examiner

Jung W Kim

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Examiner withdraws the 35 U.S.C. 112, first paragraph rejection as the amendment to the claims overcome the rejections.

### ***Response to Arguments***

2. Based on careful consideration of Applicant's remarks on pages 6-7 in the amendment filed on August 12, 2004, Applicant's arguments that Frisch does not teach a variable security profile specifying a variable number of unsuccessful power-on attempts have been fully considered and are persuasive. Hence, the 102(a) rejections of claims 1-9 have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Golding et al. U.S. Patent No. 5,265,163 and Frisch.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golding et al. U.S. Patent No. 5,265,163 (hereinafter Golding) in view of Frisch Essential System Administration 2<sup>nd</sup> Edition (hereinafter Frisch).

5. As per claim 1, Golding teaches a computer system having a power-on password stored in non-volatile memory wherein entry of a power-on password enables entry to the computer system. See Golding, col. 2, lines 18-65. Golding does not teach a variable security profile wherein the variable security profile is automatically generated when the system is turned on, the variable security profile specifying: a variable number of unsuccessful power-on password attempts permitted based upon at least one other factor chosen from time of day and day of week; and a security level of authorization of the user; and allowing or denying use of the personal computer to the user based on the security profile. Frisch teaches a variable security profile specifying a variable number of unsuccessful password attempts permitted based upon a security level of authorization of the user; and allowing or denying use of the personal computer to the user based on the security profile. See Frisch, pages 160-163, 'C2 security-style password restrictions', especially page 160, 2<sup>nd</sup> full paragraph and page 161, Table 5-2, 'u\_maxtries'. It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the variable security profile as taught by Frisch with the power-on password check disclosed by Golding to enable a higher level of security as required by establishments using the system. See Frisch, page 160, 1<sup>st</sup> full paragraph.

6. Further, Frisch does not expressly disclose the variable security profile is generated automatically when the system is turned on. However, Frisch teaches automatically running files under the /tcb directory (the security-related directory which holds the protected password database disclosed by Frisch in page 160) and preparing the system automatically when the system is turned on with available security measures. See Frisch, page 111, Figure 4-1 and page 101, 'Security-related activities'. It would be obvious to one of ordinary skill in the art at the time the invention was made to generate the variable security profile when the system is turned on. Motivation to combine ensures security features of a system are active during the entire course of operation of the computer system. Ibid.

7. Finally, Frisch does not expressly disclose the variable number of unsuccessful power-on password attempts permitted to be based also upon at least one other factor chosen from the time of day and day of week in the aforementioned sections. Frisch teaches, in a different section, restricting login access based on the time of day of the login request. See Frisch, page 224-225, 'Limiting user access to certain days and/or times of day'. It would be obvious to one of ordinary skill in the art at the time the invention was made for the number of unsuccessful power-on password attempts permitted to be based also upon at least one other factor chosen from time of day and day of week to prevent access to only those times when the user is scheduled to login, which ensures a more secure login system as known to one of ordinary skill in the art and as taught by Frisch. Ibid. The aforementioned cover the limitations of claim 1.

8. As per claim 2, Golding covers a system as outlined above in the claim 1 rejection under 35 U.S.C. 103(a). In addition, Frisch discloses including a log of the access attempts for the personal computer and the results of each attempt. See Frisch, pages 262-263, 'Monitoring unsuccessful login attempts'. The aforementioned cover the limitations of claim 2.

9. As per claim 3, Golding covers a system as outlined above in the claim 2 rejection under 35 U.S.C. 103(a). In addition, Frisch discloses only the superuser (root) is able to update the /etc/password and /etc/shadow files, which work in concert with the protected password database. See Frisch, page 144, second paragraph; pages 153-154, 'Shadow password files'; page 154-155, 'password file permission'. It follows that only the root (a system administrator) is able to update the protected password database to a less secure state. Motivation to update the variable security profile to a less secure state only by the system owner ensures only the requisite authority is able to change the state of the system to a less secure state as taught by Frisch. Ibid. The aforementioned cover the limitations of claim 3.

10. As per claim 4, Golding covers a system as outlined above in the claim 3 rejection under 35 U.S.C. 103(a). Golding does not disclose enabling a normal user to alter the variable security profile to a more secure state. Frisch discloses additional security profiles to establish a level of security in the personal computer, which include establishing and updating permissions on files owned by a user, wherein a user is

capable of changing the access level of their own files. See Frisch, pages 234-238, 'AIX access control lists' and pages 25-32, 'File Ownership' and 'File Protection'. It would be obvious to one of ordinary skill in the art at the time the invention was made for a normal user to alter the variable security profile to a more secure state. Motivation to combine enables normal owners of files to increase restrictions on personal data as taught by Frisch. Ibid. The aforementioned cover the limitations of claim 4.

11. As per claims 5 and 6, Golding covers a system as outlined above in the claim 4 rejection above under 35 U.S.C. 103(a). Although Golding does not teach using binary indicators to set the secure state level, binary fields are the standard in the industry for storing any digital information. As argued above, normal users can change file permissions they own to more secure states and the root user can alter the state of a system to less secure states by making file and login access less restrictive. Both of these changes are reflected in memory as binary manipulations. Hence, the aforementioned cover the limitations of claims 5 and 6.

12. As per claims 7-9, Frisch covers a method of providing improved security in a personal computer having an operating system and a security profile as outlined above. Further, as mentioned above, each user can modify the access level on files they own, wherein the root user is able to modify all files, including the protected password database, /etc/password and /etc/shadow files. Moreover, the administrator updates

the variable security profile in response to a security risk. See Frisch, page 223, last paragraph. The aforementioned cover the limitations of claims 7-9.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Golding in view of Frisch as applied to claims 7-9 above, and further in view of Schmidt U.S. Patent No. 5,912,621 (hereinafter Schmidt).

14. As per claim 10, Golding covers a security methodology implemented in a personal computer as defined above in the claim 7-9 rejections under 35 U.S.C. 103(a). Golding does not teach that a response by the operating system is made when the cover of the computer is removed. Schmidt teaches a computer system responsive to the removal of its physical encasing; specifically, a state reporting program is run to poll the status of an auxiliary state element, which detects when the cover is removed. A state report is further submitted to security personal for examination and further action. See Schmidt, col. 1, line 51-col. 2, line 7. It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the computer cabinet security state detection system with a computer system restricting power-on login access using the variable security profile. Motivation to combine includes addressing physical threats to prevent tampering of the physical devices of a computer and thereby enabling a more robust computer security system. See Schmidt, col. 1, lines 1-10 and 35-50. The aforementioned cover the limitations of claim 10.



**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Parzyeh et al. U.S. Patent No. 5,375,243.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W Kim whose telephone number is (571) 272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jung W Kim  
Examiner  
Art Unit 2132

Jk



THOMAS R. PEESO  
PRIMARY EXAMINER